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CHOICES

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SPECIAL ISSUE

WORLD SUMMIT FOR SOCIAL DEVELOPMENT

Unemployment: Looking Beyond the Job

The Professionals and the Powerless: Whose Reality Counts?

A Variation on the Tobin Tax

Also:

Surprising Yields of Urban Agriculture

Rwandan Crisis Triggers Ecological Disaster

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CHOICES

THE HUMAN DEVELOPMENT MAGAZINE

The World Summit for Social Development:

Toward a New Perspective

APRIL 1995

E D I T O R I A L

Rethinking Development

The World Summit for Social Development is a unique opportunity to forge a global compact to eliminate poverty, promote decent livelihoods for all and enhance social integration.

Over the last 50 years, while some countries have lurched ahead, attaining levels of prosperity which were unthinkable a generation ago, most are still mired in poverty and underdevelopment.

Time has come to give *all* people – men and women, young and old, sick and healthy, rich and poor – the chance to live long, productive and dignified lives.

Time has come to revisit development thinking.

This is the theme of this current issue of CHOICES. We need to open our minds to the fact that it is not *our* view of development that matters, but rather the view of those who have been largely left out of the process. This may require, as author Robert Chambers suggests, that we "see things the other way around." Development must start from people's perceptions and have their priorities as the ultimate end. It is we who must participate in their decisions, and not expect them to conform to ours.

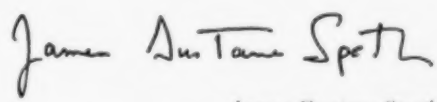
We also need to redefine our notions of international cooperation and "aid," and move toward a new ideal of genuine partnership among all actors on a global scale. We need to abandon the illusion that, sooner or later, development will "trickle down," and agree instead on a model that builds upon people's resourcefulness and ingenuity to achieve greater social equity and economic efficiency.

Eliminating poverty, ensuring livelihoods for all and confronting the root causes of social disintegration are challenges that look as daunting today as the abolition of slavery did a century and a half ago. Yet slavery has been outlawed, and largely eradicated from the face of the Earth. Why, then, should it not be possible to muster the necessary political will and resources to achieve "social progress and the betterment of the human condition, now and into the 21st century," as the draft declaration for the Social Summit states? It is within our power to end the worst aspects of human deprivation. We have no choice but to act.

To start, I urge Summit delegates to elaborate a global compact to eradicate poverty, with clearly defined objectives and targets. While responsibility for achieving this goal will lie mainly at the national level, some common principles need to be established through a global covenant:

- Development and aid budgets should be reoriented to focus on the central objective of poverty eradication.
- Both the developing countries and the assistance community should earmark enough of their existing budgets so that the goal of providing basic social services for all can be met in the coming decade.
- It should be recognized that the best way to eliminate "income poverty" is to provide productive opportunities to people – sustainable livelihoods for all. It is empowerment of people, not welfare, that is key to eradicating poverty. Better access to land and other productive assets, including credit, is vital for this purpose.
- Conserving and regenerating the natural resource base on which so many of the poor depend is essential. Today the poor are caught in a vicious downward spiral: environmental resources are consumed in order to survive, and the impoverishment of the environment leads to further impoverishment of people.
- No society can ever hope to develop if it suppresses the creative potential of 50 per cent of its people. Empowerment of women can play a decisive role in eliminating poverty.
- At the international level, poorer nations must have equitable access to expanding global opportunities in trade, technology, investment and information flows.

Having chosen to focus our work on giving priority to the poor, creating jobs, advancing women and protecting and regenerating the environment, UNDP gives its fullest support to the goals and objectives of the Social Summit. Not only can we reinstate the importance of human development within the overall development dialogue, we can also sharpen the United Nations system's response, especially at country level, to the challenge of implementing the Summit's decisions.



James Gustave Speth
Administrator
United Nations Development Programme

CHOICES

THE HUMAN DEVELOPMENT MAGAZINE

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PROMISES TO KEEP

As the United Nations marks its 50th anniversary, member states have the opportunity to renew their commitment to the "social and economic advancement of all peoples" at the World Summit for Social Development. Still unresolved is whether, and how much, money will be generated to launch an urgently needed programme of action.

By Christopher Reardon

United Nations, New York — Fewer than 10 per cent of the world's people participate fully in the political, economic, social and cultural institutions that shape their lives, according to UN sources. Among the most marginalized are the poor, women, the disabled, the elderly, minorities and rural dwellers.

"Women still form the majority of the poor, the illiterate, the refugees, those who are underpaid or are not paid at all," says Bella Abzug, a former US Congresswoman and co-founder of the New York-based Women's Environment and Development Organization. "This is the 50th anniversary of the United Nations, and it's time for women to be sharing in 50 per cent of the social and political space."

Delegates from 187 member states will be hard-pressed to live up to the commitments made in the UN Charter to all the world's people as they gather in Copenhagen on 6-12 March for the World Summit for Social Development. Joining them are representatives of hundreds of non-governmental organizations that stand firm in the belief that peace will not be possible as long as large segments of the population remain undernourished, illiterate, unemployed or homeless – conditions found in rich countries as well as poor.

"The themes selected for the Social Summit – poverty, unemployment and social disintegration – are the most compelling issues in the world today," says James Gustave Speth, Administrator of the United Nations Development Programme (UNDP). "We absolutely must address them if we ever hope to improve the conditions – which can only be described as desperate – under which as many as two billion of the world's poorest people live."

High on the conference agenda is the issue of poverty. According to UN sources, more than one billion people subsist on the equivalent of less than US$370 a year. And while tremendous progress has been made overall in raising life expectancy, adult literacy and other social

indicators, the income gap between the haves and have-nots widens daily. In 1962, the wealthiest one-fifth of the world's population earned 30 times more than the poorest fifth. Thirty years later they earn 60 times more, according to the *1992 Human Development Report.*

Jørgen Schytte / Still Pictures

Lack of gainful employment – the second item on the Summit agenda – not only perpetuates substandard living conditions in many parts of the world, but contributes to this widening gap. An estimated 30 per cent of the global labour force – more than 800 million people – are not productively employed. Another 700 million are underemployed. The shortage of productive and fulfilling work, coupled with declines in real wages, contributes to the breakdown of families and communities as well as migration and social conflict.

The third core issue is social disintegration, the weakening of the social fabric evidenced by discrimination and exclusion, violence and crime, migration and conflict.

In Copenhagen, delegates to the Summit are crafting a Programme of Action for social development. Broadly defined, the concept includes access to food, shelter, education and health services. But it goes beyond these basic needs to encompass empowerment and opportunity, cultural development and spiritual growth. "Social development is about enabling people to take responsibility for their own lives and for the well-being of their communities, based on values of personal dignity and mutual respect," says Juan Somavía, Chilean ambassador to the UN and chairperson of the Preparatory Committee for the World Summit for Social Development. "It is about releasing the positive forces of creativity and full human potential."

"Social development is not altogether different from sustainable development or human development," says Nitin Desai, UN under-secretary general for policy coordination and sustainable development. Rather, he sees it as a complementary perspective that focuses on relationships between people and on the ways these relationships can manifest themselves in income disparities and poverty. "These relationships might involve gender bias or other forms of discrimination," he says. "They might arise from the way productive resources are distributed in society, or the way institutions provide access to markets."

Simmering beneath the surface of pre-Summit negotiations was a heated debate over whether the Summit should focus narrowly on adverse social conditions, or tackle what some see as the root economic causes. In meetings leading up to Copenhagen, the 132-member Group of 77 developing countries called for measures to free the world's least developed countries from the crushing burden of debt. As a group, these countries owe more than $88 billion to commercial investors, foreign governments and multilateral institutions

such as the World Bank and the International Monetary Fund, according to the UN Conference on Trade and Development. Each year the world's poorest countries pay more than one-quarter of their export earnings to cover the interest on these debts.

Cancelling bilateral debt, reducing multilateral debt and repurchasing commercial debt could increase the resources available for national development projects in the social sector, say many delegates from African and other least developed countries. "This is an urgent concern," says Rogatien Biaou, a delegate from Benin. "We look to the Social Summit to set a strict timetable for donor and creditor countries to take specific steps to lift this burden." Biaou suggests setting a deadline of 1996, which the United Nations has proclaimed the International Year for the Elimination of Poverty.

Equally important, say other participants from developing countries, is the need to discuss the social impact of structural-adjustment policies. When the Philippines adopted such policies, for example, the government cut funding for many basic health services. "Our experience shows that when development policies overlook the social needs of a community they can have a tremendously negative impact," says Victoria Tauli-Corpuz of the Asian Indigenous Women's Network. "As long as the financial burdens from foreign debt and structural adjustment are not removed, all of the talk about health, employment, social integration will be ineffective."

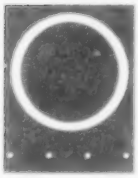
Many donor countries are reluctant to broach the subject of debt relief and structural adjustment in Copenhagen. The Government of Japan, for example, the largest contributor of official development assistance in 1993, maintains that the Social Summit is not the appropriate forum for raising such issues. "No one is denying that economic and social issues are clearly interrelated," says Mitsuko Horiuchi, a Japanese delegate to the Summit. "But there are other fora for discussing economic issues – the Paris Club, for instance, has taken up the issue of debt relief. The Social Summit gives us a very rare occasion to talk about social issues, which have not yet received the proper attention and recognition at the international level, and therefore we should not let our focus be drawn away."

any countries, both industrial and developing, say that liberalized trade will lead to economic growth, which will in turn create the jobs needed to lift people out of poverty. Some participants are raising questions about how such economic growth can be sustained. Moreover, they say the social and environmental costs of liberalized trade could erode the gains made by development efforts financed by foreign aid.

"In recent years, a kind of monoculture has developed within economic thinking," says Martin Khor, a Malaysian economist with the Third World Network. "At its heart is the notion that the unfettered operation of the so-called free market will in some magical way solve all of our social problems. And yet many of us working at the grassroots believe it is precisely because of this approach – which is fuelling the current trend toward globalization, liberalization, deregulation and privatization – that we are experiencing such increases in poverty, inequity and social disintegration."

Others, like Khor, are looking to the Social Summit to introduce checks and balances to temper the excesses of the global economy. "We need economic

growth for development," says Horacio Morales, president of the Philippine Rural Reconstruction Movement. "The question is what kind of economic growth, and at what cost."



One of the greatest challenges to social development, in addition to setting concrete goals, lies with the difficulty in obtaining adequate financial resources to support it. Already declining aid budgets have limited funds available for long-term development projects, including those that address social problems. Between 1992 and 1993, contributions from OECD countries for development assistance dropped 10 per cent – from $60.8 billion to $54.8 billion. Equally disturbing, say advocates of development, is the decreasing proportion of donor countries' gross national products (GNP) allocated for development. By 1993, it had fallen to 0.29 per cent, the lowest figure in more than 20 years. At the same time, expanding commitments to emergency relief and peacekeeping efforts are claiming an increasing share of development budgets. In 1993 alone, the UN spent $3.6 billion on peacekeeping – an amount roughly equivalent to what the organization spent in that area in the first 48 years of its existence.

Denmark is one of four countries – the others are Norway, Sweden and the Netherlands – that contribute more than 0.7 per cent of their GNP to official development assistance. What is more, the Summit's host devotes 25 per cent of its aid for human priorities such as basic education, primary health care, safe drinking water, adequate sanitation, family planning and nutrition programmes, according to the *1994 Human Development Report*. As a whole, bilateral donors target only seven per cent of aid for such concerns.

The UN Secretary-General's recent recommendations for an *Agenda for Development* list a number of innovative ways to generate additional funds. It suggests, for example, imposing a fee on speculative international financial transactions, placing a levy on fossil fuel use or earmarking a portion of the so-called peace dividend for development. The burden, advocates say, now rests with governments to take action.

"The biggest obstacle we face is the shortage of resources needed to launch development initiatives on a broad enough scale," says UNDP Administrator Speth. Case studies and macroeconomic modelling amply demonstrate how the development of poorer countries creates opportunities for industrialized ones, including avenues for investment, markets for exports, job growth and access to resources, he adds. "If the industrial world understood the degree to which its future hinged on the success of the developing world, there would be no shortage of aid." ■

Christopher Reardon, a regular contributor to the Christian Science Monitor, *is a freelance writer based in New York City.*

SOLVING THE UNEMPLOYMENT PROBLEM

The idea that "work" and a "job" are necessarily linked is a relatively recent social construct.

A rapid, unexpected change in the nature of work is taking place on the leading edges of the advanced high-tech economies, suggesting that strategies for employment development in the rest of the world are going to have to be re-thought – and probably re-thought again.

There are many facets to this change, but at its core is a de-coupling of work and jobs. For a long time, the two have been regarded as more or less synonymous: If you had a job, you worked; if you didn't, you didn't. Having a job meant being employed by an organization in a clearly-defined and stable occupational role, with duties, hours, rates of pay and promotion all more or less standardized.

But the job – in that meaning of the word – is a social invention, and a fairly recent one. As William Bridges points out in his recent book *Job Shift*: "Before 1800 – and long afterward in many cases – job always referred to some particular task or undertaking, never to a role or a position in an organization." You might do a job, but you didn't have one. The change (which Bridges calls the first job shift) came with industrialization and urbanization. And it was, for many people, a traumatic adjustment to fit the routines of the factories and offices.

The job – the kind that you had, or hoped to get – became a central fixture of life in industrial countries. Its importance was great because it served many needs: For managers and efficiency experts, job assignments were the key to assembly-line manufacturing. For union organizers, jobs protected the rights of workers. For political reformers, standardized civil service positions

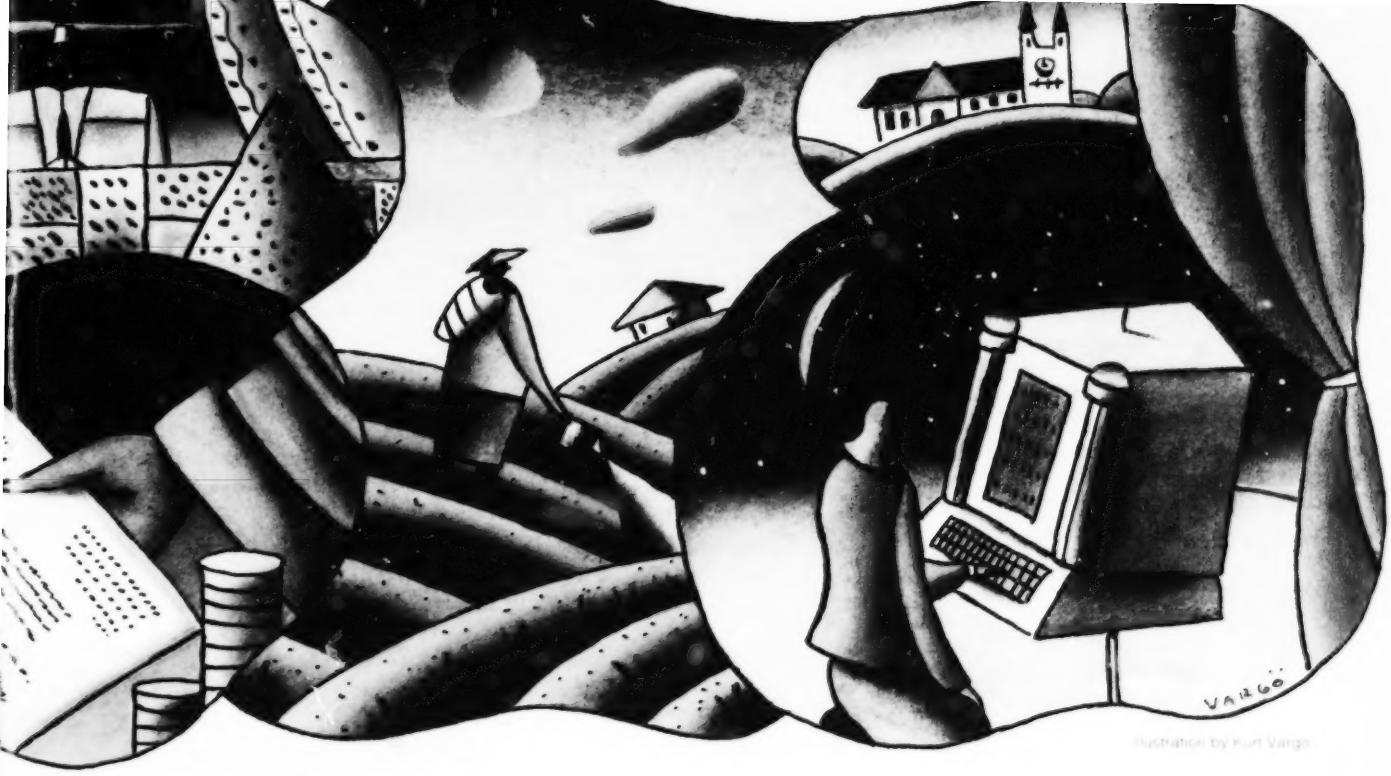


Illustration by Kurt Vargo

BY LOOKING BEYOND THE JOB

By Walter Truett Anderson

It may not be the right model to follow in a post-industrial world — or in a developing-country economy.

were the essence of good government. Jobs provided an identity to immigrants and recently-urbanized farm workers. They provided a sense of security for individuals and an organizing principle for society.

Jobs functioned in so many ways that it is surprising how many organizations are now opting for other ways to define and manage work. The second job shift is under way. Its emergence can be seen in the industrial countries of the North: in the renewed interest in telecommuting and job-sharing, the increasing use of temporary and part-time workers and contracted-out services, the changing relationships between workers and management, the growing popularity of self-employment and small business. Indeed, "de-jobbing" is proceeding at such a pace that many economists, management experts and futurists are now talking freely about the end of the job. Bridges predicts that the job as we now know it will disappear entirely – replaced by new kinds of flexible work assignments in post-job organizations – and be remembered only as a quaint artifact of the industrial age.

One reason for the change in work is the changing economic rules of the survival game among organizations that employ workers. In the United States, to stay successful in today's high-tech consumer economy, businesses have had to re-model themselves into what some experts call "agile companies" – ones that are able to respond quickly to conditions in ever-changing, fragmenting, competitive global markets. Steven L. Goldman of Lehigh University says: "It is easy to project a growing body of people who will never have a stable job, and certainly not a middle-income job, in a society adapted to the characteristics of agile production."

As economies change, so does the nature of work. Management expert and social philosopher Peter Drucker talks about the emergence of the "knowledge worker," whose work involves not simply doing something, but also applying theoretical or analytical skills. Such workers are replacing the industrial labourer as the dominant part of the workforce – and their productive activities are likely to be organized and structured much differently from those of their assembly-line predecessors.

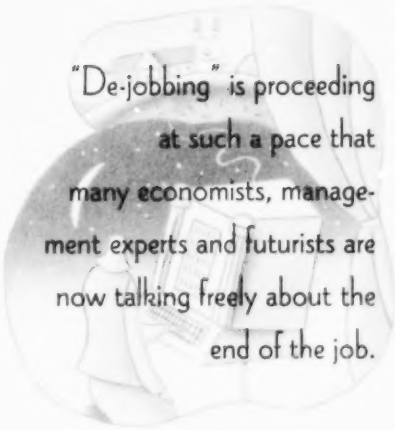
De-jobbing as a result of new technology or the emergence of a service economy is a phenomenon that gets a lot of attention these days, but it is not the whole story. At all levels of society,

in many parts of the world, people are improvising livelihoods that do not fit the industrial-era model. Immigrants to the developed countries, often unable to find steady jobs, nevertheless find places in the new landscape by being mobile, flexible, resourceful and imaginative: they moonlight, work part-time, share jobs, start small businesses. Their lives are often extremely difficult, but they are also instructive to those of us who believe you either have a job or you're out of luck. Another kind of job shift is taking place in much of post-communist Eastern Europe, where people are surviving not because the old command system is still in place – or the shiny new Western-style one has taken hold – but out of sheer ingenuity. Forced to adapt, people become hustlers, traders, independent manufacturers, freelance deal-makers.

It is too early to evaluate the implications of this multifaceted transformation of work, or to dismiss it as simply good or bad. Nevertheless, one cannot deny that it is taking place, and will bring about dramatic social changes.

On the downside, the job shift is causing great hardships for many workers and their families. It poses serious challenges to policy-makers, political activists and labour leaders in advanced post-industrial economies. An increase in the number of part-time workers, for example, which Don Smyth of the International Labour Organisation (ILO) estimates has soared to 60 million in industrial countries, has generated new concerns in the area of workers' rights. Last year in Geneva, delegates to the ILO's 75th anniversary conference adopted a new convention aimed at guaranteeing that part-time workers have equal access to protections such as the right to organize, occupational safety and health standards, and social security.

On a more positive note, the same convention recognizes the growing economic importance of part-time work and calls for employment policies to take into account "the role of part-time work in generating additional job opportunities."


"De-jobbing" is proceeding at such a pace that many economists, management experts and futurists are now talking freely about the end of the job.

The basic question appears to be whether the key to a global employment-development strategy is to play "catch-up" – trying to bring millions of people around the world into jobs in industries and the public sector; or to play "leapfrog" – creating new forms of employment in the post-industrial global economy.

In considering this question, it is interesting to note the conclusions of the International Commission on Peace and Food (ICPF) – a group of political leaders, scientists and public administrators from 15 countries who have been studying employment and other global issues for the past five years with funding from the United Nations Development Programme (UNDP) and other UN organizations. In their recently published report, *Uncommon Opportunities*, the commission underscores the need to create employment for hundreds of millions of poor people in the developing countries. Yet it also dismisses the notion that most of these people could be employed by new jobs in the corporate sector or by government-sponsored activities. Instead, it argues strongly in favour of a different approach: "For any strategy to be successful, it must give central importance to self-employment and entrepreneurship, with emphasis on agriculture, agro-industry and small firms in the informal sector."

The ICPF report frequently mentions "creating jobs," but it is quite clear that the strategy it advocates is more leapfrog than catch-up.

The proposal to generate more employment in agriculture, for example, is based on new demand for agricultural exports from developing countries. The policies designed to make the most of this opportunity include measures to upgrade technology, raise productivity, ensure the supply of essential inputs, establish marketing and distribution channels, create links between agriculture and industry, and cater to export markets.

M. S. Swaminathan, chairman of the ICPF, believes that, with these kinds of policies, many developing countries can create vigorous agriculture-based economies – with the work being undertaken primarily by small businesses and independent operators. He talks about three different "sectors" of agricultural productivity. The first is actual farming and agro-based industry: animal and poultry husbandry, agroforestry, etc. The second sector is composed of the various industries that process agricultural products. The third – and this is where it gets interesting – is the services sector. "The agricultural services sector," says Swaminathan, "is not at all well developed in many parts of the world. But many of the ecologically-sustainable agricultural practices that we wish to encourage – integrated pest management, for example – require a strong services component in order to succeed."

He envisions a growing industry engaged in the production and sale to farmers of what he calls "biological software" – items such as biological fertilizers and bio-pesticides.

All three of these sectors, he believes, can be expanded together, creating not only food and cash income, but employment – primarily self-employment. Agriculture becomes not only a source of food production, but "an engine for economic growth and development."

The report suggests a similar strategy for employment development in the non-agricultural workforce. One of its key proposals is a "new deal for the self-employed": a cluster of policies aimed at helping people to start up small enterprises that have a chance of success in a "de-jobbed" world. They include making channels for technology, training, credit, marketing and distribution more easily accessible to small businesses; and forging links among universities, research institutes and small enterprises so that entrepreneurs can get the information they need. The report also says that the creation of micro-enterprise banks and credit unions that cater to the needs of the self-employed and small firms can be "especially effective." It points to the growing number of institutions that have had excellent results providing unsubsidized loans, and achieving very low levels of default, by targeting clients, particularly women, who lack access to commercial lending institutions.

The issue of part-time work, another kind of employment that is seriously undervalued in the traditional industrial-era job mind-set, is also addressed in the ICPF report. Part-time work may not offer much at this point to developing countries, where many people are underemployed and wages are low, but it can be of great help in more advanced economies. And it is likely to be a big part of the global work picture in the years ahead. In the Netherlands, for example, "voluntary part-timism" has been identified in a recent ILO report as the single greatest work-generator, which could halve the country's unemployment. The part-time life suits the needs of many people and, because it does, appears to increase productivity significantly.

To ease the transition to more voluntary part-time employment, the ICPF proposes the removal of artificial barriers created by employment laws, social security tax laws, administrative procedures and trade union policies. It also supports the ILO caveat about protecting the rights of part-time workers.

The post-job theorists (who include a growing number of Northern futurists and economists) don't rule out public-works projects as a way to stimulate employment. But they doubt very much that such projects – particularly in already deficit-ridden developing countries – will solve the employment needs of large numbers of people around the globe. Nor do they rule out the creation of jobs – traditional industrial-era jobs – where appropriate. These are important for many countries, particularly in newly industrializing economies; labour is in short supply in Hong Kong, Singapore, South Korea and Taiwan, for example, and is likely to become so in other countries in booming Southeast Asia. But the fast-changing conditions of the global economy make it difficult to guarantee the kind of job stability that went with big industry in the Western countries a few decades back: industries now will have to be "agile companies," and their employees will have to be agile as well.

A certain agility may also be necessary in agriculture, particularly in countries that for many years have depended heavily on producing commodities such as sugar for export as a means of generating income and employment. As Northern laboratories develop non-agricultural substitutes for many of these commodities – and this is already beginning to happen – the bottom may fall out of "monoculture" economies. Calestous Juma, director of the African Centre for Technology Studies in Nairobi, warns: "The impact will not be only economic, but will have long-run political implications as communities attempt to reorganize themselves in response to the changed conditions. It is, therefore, in the interest of raw materials exporters to closely monitor current trends in biotechnology and the use of genetic resources and modify their internal policies in anticipation of potential long-term effects."

This calls for flexibility, and an ability to get information and to act on it. Government officials, development workers, community leaders and individuals will, in some respects, all have to be "knowledge workers" if they are to keep ahead of global changes. Jobs are going to be created not just by putting people to work, but by finding – or creating – new niches where they can be productive.

It is still possible to talk about jobs for all, and to resist the assumption made by many economists that high levels of unemployment are now inevitable. But, as we move ahead into the global information economy, we may be moving back into an older conception of the job, and seeing it again as something you do, rather than as something you have – or that has you.

Walter Truett Anderson is a political scientist, an associate editor at the Pacific News Service and a fellow of the Meridian Institute, an international organization concerned with governance and leadership issues.

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PERUVIAN POOR CREATE JOBS FOR THEMSELVES

By Andrés Tapia

Lima — To walk along Jirón Pachitea, one of Lima's countless street "malls," is to see a sophisticated job-creation machine in full operation.

On a rickety sidewalk table outside a bookstore, a husband and wife team offers dozens of varieties of nuts and bolts. To their left, a mother breast-feeding an infant sells light fixtures, and to their right, a 10-year-old boy covers for his parents at a stand selling door hinges while seeking a loan from a street "financier." Further down the block, ceramic toilets and bath-tubs for sale obstruct the congested sidewalk. And at lunch-time shoppers and merchants alike swarm the mobile kitchens loaded into push-pedal carts offering a choice of chicken soup, steamed flounder and beef stew.

Around the corner, 1995 calendars for sale – with illustrations ranging from Michael Jackson to a nude blonde beauty – provide a colourful backdrop to the shoe vendors, vegetable hawkers, magazine peddlers, computer hardware brokers, pirated-video cassette dealers, money changers and hustling car repairmen competing for the Limeños' scarce dollars.

The cacophony and apparent chaos on this and hundreds of other city streets belies a powerful and dynamic informal economy. Hernando de Soto, Peruvian economist and author of *The Other Path*, credits the informal sector with providing 60 per cent of the country's work hours, 70 per cent of its housing and 95 per cent of its mass transport.

This bustling activity is not the result of government programmes or top-down corporate economic development, he points out. Desperate to earn a living, and yet shut out from the country's economic mainstream, Peru's poor have found ways to employ themselves. In a country with virtually no safety net, it's work or starve. As a result, Peru's poor have developed a multi-million dollar parallel economy on which the country depends for much of its goods and services.

Many informal ventures may appear to be shoestring operations, but the entrepreneurs who run them do not lack sophistication: "I suffered a tremendous decapitalization when Fujimori devalued the currency three years ago," says Juan Chagua, a street vendor of running-shoes. "But just recently I've been getting close to recouping my losses, and by the end of the year I should be back to healthier profit margins."

The informal economy is also credited by many with having been a bulwark against the Shining Path, Peru's notoriously brutal guerrilla movement. "The informal economy so far has worked as a filter that prevents rebellion," says José Loayza, an economist with Alternativa, a Peruvian think-tank

Jirón Pachitea, one of Lima's countless street "malls."

Samuel Lima

focused on the informal sector. He points out that the informal sector provides livelihoods for thousands of people who would not be able to find work otherwise and also provides a way for the newly laid-off to make a living.

Despite the astounding advances of the *informales*, as they are known, most of them remain dirt poor, living hand-to-mouth and vulnerable to any hiccups in the economy. These conditions often make it necessary for all family members to find work – including children. It is De Soto's belief that the *informales'* potential – both for themselves and for the health of the national economy – has not yet been tapped. He says that state policy has a long way to go if it is to be relevant to the reality of the streets. "There is a serious divorce between what people do and how the government governs," he says.

De Soto and others point to the fact that even though the Peruvian economy is growing at nearly 10 per cent a year, not enough new jobs have been created through the formal economy, often the focus of national and international development organizations. De Soto sees enormous possibility for Peru's economic growth if the *informales* can be "formalized" by granting them some basic economic rights.

"What we have in Peru is economic apartheid," says de Soto, "which keeps the poor structurally unable to participate on equal footing with the rest of the country." De Soto believes this apartheid system can be dismantled through three major initiatives. The first is what President Alberto Fujimori has already done in part – granting basic legal recognition of the *informales'* existence. For years they were considered illegal, and periodic police sweeps cleared them from Lima's streets. That no longer happens.

Ruth Mosery / UNDP

Street vendor in Lima.

Second, de Soto would like to see representative democracy. "The *informales* have no voice in the government and no one to represent them," he says. As he explains it, though Peru elects representatives, it has a congressional system where leaders are not accountable to specific constituencies. In Peru, one votes for a political party and not for a specific candidate. This means, for example, that if a party gets 22 per cent of the popular vote, the first 22 names on a list of 100 candidates are the ones who get parliament seats. This often ensures the election of the same group of party cadre leaders, regardless of whether or not they have represented the interests of ordinary citizens.

Third, de Soto thinks the country should dismantle the regulatory maze that keeps the poor from fully participating in the country's economic life. It should be easier, for example, to register one's business and to get title to informal properties.

Until recently, starting up a formal business in Peru required seven different permits from the central government that involved up to 200 working days of paperwork. In 1990, de Soto's organization, the Institute for Liberty and Democracy, helped to streamline the process by designing and running the Unified Business Registry, which became law in 1991. In the three years since its passage, more than a quarter of a million businesses that would otherwise not have been formalized have registered – quadrupling the number of registered businesses in Peru. This has meant not only more security for small entrepreneurs, but an increase in tax revenues for the government.

A long-standing interest of de Soto's has been helping the *informales* obtain titles to their informal properties, which can also mean access to credit. An important difference between developed and less developed countries, he says, has to do with property rights. In "property economies," such as the US, 70 per cent of the credit new businesses receive is secured by using formal titles as collateral for mortgages. In contrast, in a country like Peru, more than 90 per cent of the rural and 50 per cent of the urban properties are unprotected by formalized titles.

"Formal titles provide security of tenure, longer-term planning and incentives to protect land, water and other resources," adds de Soto. "As long as they don't have formalized titles, the *informales'* assets remain outside the social market economy."

To support their conclusions, the Institute for Liberty and Democracy undertook a 10-year study on the issue of land ownership, which was completed last year. The study was funded in part by UNDP, the US Agency for International Development and the World Bank. The result was a pilot programme called PROFORM that documents the various political, social and economic obstacles to formal property ownership, and offers a comprehensive approach to granting formal land titles.

The results speak for themselves: in the three-and-a-half years since the programme became operational, 150,000 urban and rural properties have been formalized at a rate many times faster than other titling and registration programmes in Latin America, and at a fraction of the cost. In addition, investment in property increased ninefold when squatters obtained formalized titles to their homes. De Soto now wants to see widespread use of the PROFORM approach.

Jorge Ramirez, a Peruvian who recently obtained a formal property title through PROFORM says, "Now that I have legal title to my property I can use it as security to get credit. I no longer see free enterprise as the privilege of others."

De Soto feels these simple, commonsense proposals could have a tremendous impact on the country's economic life.

And Peru's *informales*, as they ride Lima's multicolored public transportation *combis* in and out of the shantytowns called *pueblos jovenes*, are anxious that social policy soon catch up to the new economic reality they have created. ■

Andrés Tapia, a Peruvian journalist based in Chicago, is an associate editor with the Pacific News Service.

THE PROFESSIONALS AND THE POWERLESS: WHOSE REALITY COUNTS?

A key challenge for the Social Summit, argues Robert Chambers, is to define the "problems" and seek solutions from the perspective of the poor. If this challenge is not met, he says, we risk plodding along in worthy but well-worn ruts that lead nowhere new.

We are all part of a world system that perpetuates poverty and deprivation. Those who are poor and deprived do not wish to be poor and deprived. We who are well off and have power say that poverty and deprivation are bad, and should be reduced or eliminated. Yet poverty and deprivation prove robustly sustainable. Why?

The usual response is to seek answers by analyzing poverty and deprivation themselves. It is not surprising. We in power do not like to examine ourselves. To salve our consciences we rationalize: *The objects of development are the poor anyway, not us. It is they who are the problem, not us.*

But poverty and deprivation are functions of polarization, of power and powerlessness. Any practical analysis has to examine the whole system: "us" as well as "them." One of the most important challenges for the Social Summit, as I see it, is to ask the question: Whose reality counts? The reality of the few in the centres of power, or the reality of the poor, the many at the periphery?

As development professionals, our views of the realities of the poor, and of what should be done, are constructed mainly from a distance. We promulgate those views in the words and concepts we use, which then become confused with reality itself. In much professional discourse, for example, the term "poverty" has been narrowly defined for purposes of measurement and comparison. This narrow, technical definition, which I will call "income poverty," has overtaken common usage. What is recorded as having been measured – often low consumption – masquerades in speech and prose as a much larger reality. It is then but a short step to treating what has not been measured as not really real. Patterns of dominance are reinforced: of the material over the experiential; of the physical over the social; of the measured and measurable over the unmeasured and unmeasurable; of economics over disciplines concerned with people as people.

What matters most to poor people often differs from what outsiders assume. Income matters, but sometimes less than other aspects of life – health, security, self-respect, family and social life, access to goods and services. In the early 1980s, for example, N.S. Jodha asked people in two villages in Rajasthan, India to define their own categories and criteria of well-being. He then compared this to data he had collected some 20 years earlier. The 36 households whose incomes had shrunk sig-

nificantly in real terms, were, on average, better off, according to the criteria they had expressed themselves. While their real per capita income was less, other improvements had, in their eyes, made their lives better: improved housing, wearing shoes regularly, less dependence on patrons and landlords, not having to migrate in search of work.

As this and other research shows, people's own descriptions of well-being and deprivation – of the good and bad life – tend to be multi-dimensional. In recent studies in Asia and sub-Saharan Africa, the factors cited as detracting from well-being included disablement, the lack of land or farming tools, being "poor in people" (lacking family or other sources of social support), and being forced to accept demeaning work. In contrast to the professional definition of poverty – which tends to be narrow and one-dimensional – the realities of the poor are local, complex, diverse and dynamic.

As with poverty, so it is with the notion of employment. Jobs, unemployment, workplace and workforce are concepts derived from the urban industrial experience of the North. Yet we project them onto the very different realities of the rural and agricultural South, and of the urban informal sector. The majority of the world's families cope by having different members of the household perform different tasks in different places at different times of the year. For the majority of the world's people the challenge is not one of jobs or employment; it is how to make their labour more productive and how to gain more secure, sustainable and adequate livelihoods.

By looking at poverty and employment from this vantage point, we begin to reframe the objectives of development. We are able to move from ideas about reducing income poverty to enhancing well-being, and from increasing employment to supporting sustainable livelihoods. Yet to identify and implement a truly new agenda for development will also require us to change: to be able to reverse the normal view, to see another reality, to soften and flatten hierarchy and to embrace a new professionalism. As stated in a recent vision paper for the Consultative Group on International Agricultural Research, written by a group chaired by Gordon Conway, the challenge is to "reverse the chain of logic, starting with the socio-economic demands of poor households" in order to identify appropriate research priorities.

Underlying all of this is the basic right of people to define their own needs and to set their own agenda. In the past few years a number of powerful tools have been developed that have enabled poor people and communities to do just that. Participatory Rural Appraisals (PRA) and Poverty Assessments (PPA), for example, conducted under the auspices of the World Bank in Ghana, Kenya, Zambia and other countries, have helped people in both urban and rural areas to analyze their own condition, express their own values and define their own priorities.

But to carry these priorities forward will demand deep changes in the way we development professionals think and behave. At the most obvious personal level, this will involve looking at the concepts we use, the language we employ and the actions we take or neglect to take. While we have been quick to grasp the potential of concepts such as "participation," "ownership" and "empowerment," we have been slower to recognize the changes these concepts demand of *us*. We have failed to understand that participation by them means non-ownership by us. Empowerment for them means disempowerment for us.

In contrast to the professional definition of poverty — which tends to be narrow and one-dimensional — the realities of the poor are local, complex, diverse and dynamic.

Much of the challenge has to do with both power and ownership. It requires giving up behaviours that reinforce the dominance of the North, and of whatever is industrial, capital-intensive and "sophisticated." It demands handing over the initiative to others, enabling them to do more and to do it in their own way.

If the poor and weak are not to see the Social Summit as a celebration of hypocrisy – signifying sustainable privilege for us, not sustainable well-being for them – the key is to enable them to express their reality, to put that reality first, and to make it count. ■

Robert Chambers is a fellow at the Institute of Development Studies, University of Sussex. A longer version of this essay was first presented by Mr. Chambers in July 1994 at a UNDP-sponsored roundtable on "Change: Social Conflict or Harmony" in Stockholm. It is available on the Internet (gopher: undp.org).

HARNESSING THE GLOBAL CURRENCY MARKET FOR THE GLOBAL COMMON GOOD

The aims of the Social Summit may well remain exercises on paper without financial resources to back them up. Recently, a number of ideas have been proposed to mobilize funds beyond the traditional sources. Economist Ruben Mendez describes one such proposal — a variation on the "Tobin tax" — that could potentially generate billions of dollars a year.

The world's largest and most liquid financial market is the market for foreign exchange. Each day, more than US$1 trillion ($10^{12}$) worth of foreign currencies change hands – an amount equivalent to the entire US money supply as measured by total currency in circulation plus demand deposits. While much of this trading serves the needs of travellers, investors, exporters, importers and others, a good deal of it is purely speculative.

For more than 20 years, James Tobin, winner of the 1981 Nobel Memorial Prize in Economic Science, has advocated a tax on foreign exchange transactions as a way of dampening speculation and market volatility. A tax of one-half per cent, he estimates, would discourage speculation but not genuine investment. Currencies would rise and fall mainly on the basis of economic "fundamentals," not trader speculation, enabling national central banks to plan monetary policy based on domestic needs. Professor Tobin has also noted that such a tax could generate vast revenues, which he proposes should be used for international development.

The catapulting financial requirements of international social programmes, peacekeeping and other global concerns have revived interest in the "Tobin tax." Although I recommended it myself in 1993 to the Commission on Global Governance, after further research I find that formidable obstacles stand in its way: Foreign exchange transactions are often loose and informal. They leave no "paper trail" by which they can be monitored and taxed. Setting up a tax system would entail an extensive administrative structure and considerable costs. And because a universal and watertight system seems improbable, money changers could go "offshore" to low- or zero-tax jurisdictions. Undoubtedly, many would oppose global taxation on principle and charge "interference" with the now sacrosanct market mechanism.

The alternative I am proposing – a variation that would tap the same extensive base as the Tobin tax – is the establishment of a Foreign Currency Exchange. Because it would be a free-market mechanism, the Exchange would avoid most of the political and practical obstacles facing the Tobin tax. At the same time, it could generate substantial financial resources for the common good.

The rationale for such an Exchange stems from the very fact that the present market is disorganized and consists, in actuality, of two markets: an inside interbank market, where competition is keen and the best prices prevail, and the publicly quoted market to which end users – importers, exporters, industrial corporations, tourists and other individuals – have access, but only at inflated prices.

The Exchange, which I call "*FXE*" (*FX* being the standard abbreviation for foreign exchange), would serve the foreign currency market in the same way that national bourses, or securities exchanges, handle markets for stocks and bonds. It would match buy and sell orders electronically, similarly to the way it is done, for instance, by the completely automated Tokyo Stock Exchange. *FXE* would lower the cost of changing money to buyers and sellers by giving them actual, competitive prices for foreign currency, rather than the padded prices they now pay, and access to other buyers and sellers, which they now lack. It would also bring order and efficiency to the present chaotic market and – if properly sponsored, designed and managed – could generate vast revenues from licensing and user fees.

FXE's revenue potential is enormous. About 12 per cent of the present volume of trading is for end users, which is the market that the Exchange would presumably serve. On the basis of a total market of $1 trillion, end users represent $120 billion daily. *FXE* would become their market of choice since it would give them the best prices for changing foreign currencies. If *FXE* captured 70 per cent of this market, the volume of trading it handles would be on the order of $84 billion daily. Thus, fees or commissions could be set at a very low rate: a 0.1 per cent rate, for exam-

ple, would yield $84 million daily, and 1.0 per cent would yield ten times that amount, or $840 million a day. These rates (which would be adjusted to the size of orders) would be less than the premiums most end users pay in the present two-tier market.

This simplified illustration suggests the order of magnitude of revenues involved. The costs of running *FXE*, which would entail setting up and operating a global computer network, would also be tremendous, but far less than the income it would generate over time. There is already sufficient evidence to suggest that a full feasibility study is warranted: One has only to look at the airlines and travel agencies to see that a global computer network is feasible. Three outfits, in fact, (Reuters, MINEX of Japan, and EBS, a consortium of international banks) have recently engaged in automated foreign currency deal-matching, although on a smaller scale than what I am proposing.

Because of high capital and running costs, and the enormous advantages of a large-scale operation, a currency exchange has the makings of what economists call a "natural monopoly." To protect society, the accepted ways of dealing with such monopolies are to have a regulated public utility, like American electric companies, or for the public sector to provide the service itself, as in the case of the European post office. For these reasons, and because of the potential benefits to society, the case could be made for setting up a foreign currency exchange like *FXE* as a single publicly-owned entity.

While the idea of a private-public partnership could also be explored, my recommendation is that *FXE* be established as a specialized agency or subsidiary organ of the United Nations. Its governing board could comprise developed and developing countries in equal numbers, as well as international organizations such as the UN, the United Nations Development Programme (UNDP), the World Bank, the regional development banks, and possibly the IMF and the Bank for International Settlements.

The capital investment required for *FXE* could be shared among these organizations; it may also be necessary to borrow funds in the initial stages. If central banks and organizations such as the World Bank used *FXE* as the channel for their substantial foreign exchange transactions, it could have a quick start.

A distinct advantage of the *FXE* approach is that it would likely garner more political support than the Tobin tax. The banks would oppose it, but the end users would gain from its lower rates. National central banks and treasuries would welcome an entity that would bring some order to a chaotic market and enable them to monitor foreign exchange transactions. And advocates of free enterprise would appreciate a market mechanism that would promote competition.

On the cautionary side, it is essential that *FXE* operations be insulated from political self-interests and bureaucratic practices, and that its management be of the highest calibre and expertise. At the same time, the enterprise should have a social conscience. The IMF and central and commercial bankers are concerned principally with monetary matters and not with social considerations (except inflation). It is therefore important that the UN, or at least UNDP, have a stake in its operation, to ensure that profits are allocated for international social programmes and public goods.

The need for additional and alternative sources of financing is urgent. There is still the unfinished business of development, for which there is renewed concern, especially in the area of social needs. Yet official development assistance (ODA) continues to languish, as it has for the last 25 years, at a pitiful one-third of one per cent of the GNP of rich nations, less than half the official target and with no prospects for improvement. There are the demands of the environment, codified at the Earth Summit in *Agenda 21*, with a price tag of $562 billion a year, $142 billion of it needed as concessional financing for developing countries. Practically none of this money is forthcoming. The UN peacekeeping budget has more than doubled in two years to $3.3 billion in 1994, and is growing inexorably. Initial estimates of the costs of a standing UN army or national reserves on alert for UN peacekeeping assignments come to levels as high as $50 billion yearly – an amount that clearly cannot be spread among the member states, as peacekeeping costs are now. Then there is the plight of refugees and of failed states, which need adequately financed international aid packages comprising a spectrum of activities, from peacekeeping and famine relief to reconstruction, governance and development.

If the Programme of Action agreed upon at the Social Summit has to rely again on the moralizing and voluntary contributions of rich nations, it will suffer the same fate as the Earth Summit and other UN mega-conferences. It is time to make an intellectual quantum leap, and to look beyond the nation-state for new, innovative and independent transnational sources of funds. ■

Ruben Mendez, a former senior UNDP official, is currently writing a history of UNDP and is teaching at New York and Yale Universities. He has written extensively on the subject of innovative financing, including in a recent book, International Public Finance: A New Perspective on Global Relations *(New York: Oxford University Press, 1992). This article is based on a study he prepared for the Commission on Global Governance, which will be published in early 1995 by Martinus Nijhoff/Kluwer Academic Publishers.*

WORLD CITIES, COMMON PROBLEMS

By Ellen Posner

As a lead up to the Social Summit, mayors from around the world gathered at UN headquarters to discuss the problems that ail their cities. Surprising to some, officials from urban centres as diverse as Toronto and Kampala found more commonality than difference.

Stephanie Hollyman

United Nations, New York – They are among mankind's most ambitious undertakings, and embody its most ignoble failures. They are the world's cities and, for better or for worse, they are home to a growing share of the global population. The problems and promise of cities around the world was the topic of a two-day discussion last August, when urban officials (including 100 mayors) from 50 countries gathered at United Nations headquarters in New York.

Cities of every type and size from nearly every part of the world were represented. And, understandably, various opinions were elicited by such questions as whether it is a worse fate to be poor in a North American or European city than in a city of a developing country, and how much any individual city could accomplish with local grassroots efforts in the absence of a larger and more comprehensive vision. There was, however, far more convergence than debate at the International Colloquium of Mayors on Social Development, which was sponsored by the United Nations Development Programme (UNDP), the UN Centre for Human Settlements and the "Group of Four," a network of cities associations from both developed and developing countries.

The participants, in fact, appeared to be both relieved and exultant to encounter each other – which lent the gathering, at moments, the atmosphere of an international self-help group. With good reason. Those elected offi-

A "camp" for the homeless in Los Angeles in the 1980s that was later disbanded.

cials working on the front lines in their respective cities know with certainty what many people in the world are only barely aware of: that our increasingly small and interdependent world is in the process of being linked by a network of cities; that a large number of these cities (particularly in developing countries) are growing at a fantastic rate as people migrate from rural to urban areas in numbers unprecedented in human history; that with this migration, compounded by structural changes in the global economy, poverty also is moving into cities in the most concentrated way since the worst cases of the industrial revolution.

As Toshiyuki Niwa, speaking on behalf of UNDP Administrator James Gustave Speth, reminded the audience at the opening of the colloquium, "Soon half of humanity will live in cities and towns." This stupendous demographic shift, he said "adds urgency to the search for urban solutions."

He was, of course, preaching to the converted. There was hardly a person in the room who needed to be reminded of the pressures facing cities as we approach the 21st century. Nor was anyone there lacking awareness of the ways in which global forces now have extraordinary impact: how currency fluctuations, a shiver in a financial market somewhere else, the mobility of capital, and political instability can affect daily circumstances in their own cities. But, as one participant, David John Comley, housing director for the hard-hit northern industrial city of Glasgow, explained, he and his colleagues found that it was worth travelling to the colloquium to share their experiences and to see that they were not alone. "The value in coming to the conference was hearing others speak about their problems," he said. He found, he said, that his city had much in common with cities in vastly different parts of the world, including developing countries. "The problems are not different in kind," he observed, "but different in scale."

As the conference proceeded, it seemed increasingly clear that the problems faced by municipal governments were remarkably similar from East to West, from industrial to developing country, with unemployment, poverty and inadequate housing at the top of the list.

There had been some advance warning. A survey taken by UNDP prior to the colloquium revealed that unemployment constitutes the number one urban problem in cities around the world. Responding to the survey, J.E. Havermans, mayor of The Hague reported, "We have 10,000 people unemployed now, a large percentage of whom are migrants. By the year 2000, unemployment is expected to increase to 50,000 people in the city." From Cologne, mayor Norbert Burger reported, "We lost 10,000 industrial jobs in 1993 alone." Fred Yiga, mayor of Kampala, Uganda, cited unemployment as that city's most severe problem. And Patrus Anaias of Belo Horizonte, Brazil said that "poor families without jobs or with low salaries cause terrible social problems. Their children get involved with drugs, prostitution and crime." Nearly identical concerns were expressed by the mayor of the Romanian city of Iasi, as well as by the mayor of Toronto, Canada.

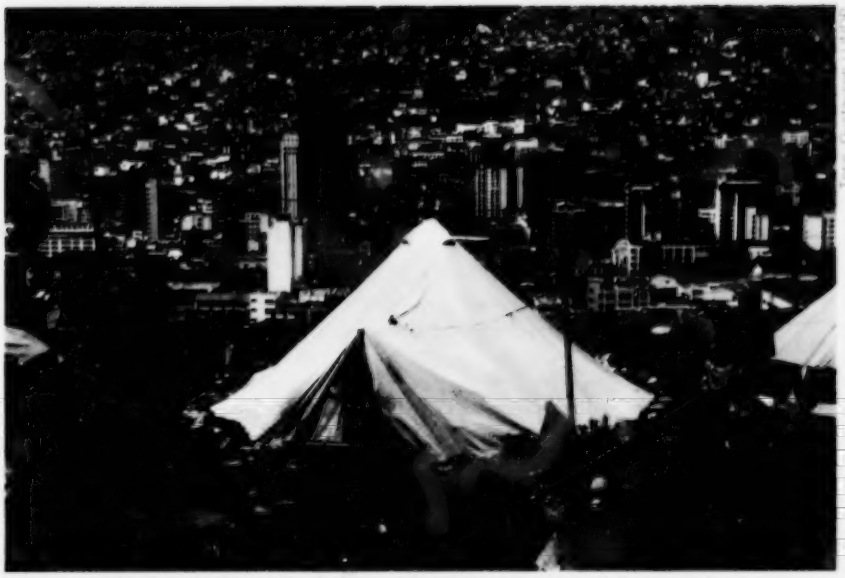
The existence of this broad global pattern of similarities among cities would seem to go against conventional wisdom. But there were those who found it almost predictable. Nat Nunoo-Amarteifio, the mayor of Accra, Ghana, standing by a window at the end of the first day of the conference gestured toward a dramatic view of New York's skyline: "When you look at New York, at first you see a nice sheen on everything," he said. But then, he added, "you notice the homeless on the streets," and the similarities become obvious. Mr. Nunoo-Amarteifio didn't see why common problems, or even the difficulty in solving them, should surprise anyone, since, as he said "this is all about human beings."

That intractable human element — the aspirations and limitations that inform all endeavours, from managing a household to managing a government — was made clear just before the colloquium began, when national representatives of UNDP's LIFE (Local Initiative Facility for Urban Environment) programme met to review its progress and future direction. Now operating in 15 countries and addressing the relationship between environmental degradation and urban poverty in developing countries, LIFE intervenes at the local level, encouraging dialogue between and among local entities. It also provides very specifically targeted grants for programmes such as recycling, waste disposal, environmental improvement. The ultimate objective is to link local initiatives to an international strategy.

The LIFE representatives discussed the broadest goals of the programme, which were uplifting and optimistic: democracy and social equity, for example. Obstacles were then noted: limitations of funding, bureaucracy, shortage of strategic vision and long-term thinking, resistance by those in power. That is, the usual human difficulties, which can bog down anything, anywhere.

As Robertson Work, coordinator for LIFE observed, in our rapidly changing and sometimes confusing world there is a tendency to look around at complicated difficulties and wonder "who is in charge." And then you realize, he said "We are."

That would leave "us" in charge of alleviating poverty — a challenge that has risen to the very top of the urban agenda. This is no simple matter at a time when the terms "structural change" and "structural adjustment"



La Paz, Bolivia. By the year 2000, 90 per cent of the poor in Latin America will be concentrated in cities and towns.

are used broadly and loosely to describe mystifying economic transformation; when, as Jorge Wilheim, deputy secretary of Habitat II, the "City Summit" that will be held next year in Istanbul, pointed out to this colloquium, "the whole capitalistic system of production is gradually and profoundly changing."

"This transition translates into some dramatic issues," he said. "Unemployment is increasing and revealing a technological and structural component; the distance between rich and poor income brackets is increasing; the capacity to govern is diminishing and the role of the state is disputed everywhere." Although no one has yet devised an effective and comprehensive strategy for dealing with this transformation, Work posited that in the future we may find more "experiments, mixtures of economic systems, mixed ideological frameworks."

Strategies for addressing poverty are, at least, being reviewed and reassessed. "Cities, People and Poverty," for instance, a 1991 UNDP policy paper, reported that "one of the mistakes of past urban models was to focus on 'projects,' rather than programmes and policies." Instead of concentrating on upgrading such visible symbols of poverty as squatter settlements, the report noted, "the real issue should be income generation." With better income, people would be able to move into better housing. And this is more likely to occur if attention is paid to interest rates, access to loans, incentives for manufacturing, labour laws, licensing, and, in general, a well developed financial sector.

The search for imaginative solutions is especially urgent, since mayors everywhere are finding that old approaches for generating employment – some of which sometimes worked – must be jettisoned. Valentino Castellani, the mayor of Turin, for instance, reported that the economy of his city, which has been based on mechanical industry (mostly automobiles) is now in a "deep structural crisis," and he finds that the resulting poverty "cannot be controlled by any of the traditional methods." Equally disconcerting, he explained, is the realization that "even economic growth does not guarantee full employment." [For another perspective on employment, see page 8.]

The very nature of urban poverty is also being addressed. Akin Mabogunje of the National Board of Community Banks in Abuja, Nigeria, reminded his audience that poverty should not be calculated merely on the basis of assets; that factors which are far less easily measurable, such as "social marginalization," must be taken into account. Poverty should be understood, he said, as a "web of deprivation" from which people may not be able to escape without help. That population is growing, he said, by the addition of the "new poor," who have lost their jobs due to structural adjustments in the economy. The mayor of Maracaibo, Venezuela, described what he sees as an "inexorable" pattern of systematic impoverishment reaching dramatic proportions in many cities of the developing as well as the developed world.

One alarming trend is that unemployment and poverty are increasingly affecting the young. Hans Klintbom, mayor of Visby, located on the Swedish island of Gotland, reported in the UNDP survey that "almost 40 per cent of people between the ages of 18 and 24 are without 'real work' at this moment" in his town. Similarly, youth unemployment is a growing problem in Helsinki, where the city government fears a continuation will lead to "a permanent marginalization of our young people." The biggest increase in homelessness in Glasgow is now among the young. Shelters are being arranged and training schemes developed, although not at a rate commensurate with need. Even if there were enough training programmes, said the city's housing director, there aren't enough jobs for those young people anyway. Many of them will "drift down to London" in search of better opportunities, he said. But they don't find them there, and they eventually return.

The serious economic and social problems that were being discussed may not have obvious and immediate remedies. But the very fact that a city-to-city dialogue was under way demonstrated an enlightened awareness of global transformations now taking place and suggested that the search for new paradigms and new solutions was on.

Topics at the colloquium, in fact, ranged from the elemental to the sublime. Solid waste, for instance, was a subject of numerous formal presentations and informal discussions. Addressing that subject, Sharpe James, the mayor of Newark, New Jersey, confessed, first, that he knew very well that there were economic and social problems in his city that he could not solve, at least not for the time being. So he decided to solve something. When he seized upon recycling, his plan was met with astonishment: "In Newark? People throw garbage out the window in Newark!" But he and his administration developed a recycling programme that reduced pollution, saved the city money, and – most important – gave residents an infusion of pride and hope.

The city of Vienna was also represented at the colloquium, although it currently boasts nearly full employment and has an excellent record of building housing. Ott Frey, of Vienna's City Planning Bureau explained, however, that since the fall of communism, "massive immigration" to Vienna has created a "totally new situation" that may leave the city with a shortage of adequate housing – which was another problem frequently cited by mayors from all over the world.

Many other cities also reported immigration as a central concern. Immigrants from Asia, North Africa and the former Yugoslavia, for instance, have swamped Turin, further challenging its resources. The Hague reported that a high percentage of the unemployed in that city are migrants. And on 15 September, *The New York Times* reported that Beijing – one of the world's "mega-cities" – was planning to take a novel approach to immigration (primarily residents of other parts of China, flooding into the city in search of work) by charging the astounding sum of US$5,800-$11,600 for each new person coming from outside Beijing.

This colloquium did not lose sight of the fact that immigration is a push-pull phenomenon. While some people are being pushed out of other places for economic, political or environmental reasons, others are being pulled to cities for their promise, excitement and allure. Cities are, after all, the largest and most complex works of art ever created by human beings. They offer unparalleled opportunities for encounters of every sort, for the liveliest of dialogues, for education, employment and professional advancement. They have not been made obsolete by technology (even at the loftiest reaches of London's financial world, having lunch is still considered to be an important part of doing business; face-to-face encounters are still valued in politics and journalism). They are very important economic engines: about 60 per cent of the gross national product of developing countries is created in urban areas. And diversity of population – which is achieved through immigration – is the very essence of cosmopolitanism.

Jorge Wilheim, in fact, opened his remarks by praising the city, even though, he said, this has not been "a politically correct behaviour" in the last decade.

"The main opportunities and breakthroughs for development will be met and built in human settlements," he said. Cities are where the mega-trends of the new century will be played out most dramatically: the vast changes in capitalism, the impact of information technology, globalization (which, as Mabogunje noted, "is destined to greatly enhance the wealth-creating capabilities of mankind") and the changing role and format of the state.

There are even predictions of the re-emergence of the city-state. In the US magazine *The Utne Reader* sociologist Daniel Bell was quoted as saying that "The nation-state is becoming too small for the big problems of life and too big for the small problems." The article posited that "cities are again starting to centre stage, gaining a self-awareness and self-direction unknown since the Middle Ages," and are likely to become the foundation of tomorrow's political and economic systems.

There will undoubtedly be cooperation and competition during this extraordinary period of transformation – with cities serving as the great stages on which the drama of life unfolds. And the Mayor's Colloquium served as a provocative introduction to the important issues that will be discussed both at the World Summit for Social Development in March and at the UN Conference on Human Settlements (Habitat II) in Istanbul in 1996 – just four years away from the 21st century. ■

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The Surprising Yields of Urban Agriculture

Growing food in Nairobi, Kenya.

Growing fruit and vegetables, raising fish and chicken, and similar farming activities mean food and income for millions of urban dwellers. Yet despite these and other benefits, urban agriculture has been ignored — or even prohibited — in most cities. The challenge, say some, is to make it safer and more productive.

By Kristin Helmore and Annu Ratta

Stuck in snarls of traffic in the steamy South Indian city of Madras, drivers, cyclists and pedestrians cover their faces against the fumes and odours of urbanization. Fetid waterways give off the stench of sewage, and vehicles of every description spew leaded exhaust into the dust-filled air. The city seems a hard place: inhuman, unhealthy, inhospitable.

But follow one of those foul rivers away from the commercial areas, and chances are it will lead to a sleepy lagoon replete with purple water hyacinths, fish for the catching and placidly paddling ducks. Throughout this crowded modern city, clusters of small houses made of palm matting are surrounded by vegetable gardens, banana groves, stands of mango and papaya, rice paddies, scratching chickens and ruminating cows.

Madras is not unusual. In virtually every city around the globe, agriculture coexists with fast-paced urban life. In industrial countries such as Japan and the Netherlands, urban farming has long been a response to the problem of limited agricultural land. In cities in the United States, green spaces offer therapeutic relief and vegetable gardens provide fresh produce to markets and income for the homeless. New York, for example, has more than 1,000 community gardens. Berlin has 80,000 garden plots.

In the developing world, where the rate of urbanization is highest, urban agriculture is a source of income for an estimated 100 million people, and a source of food for five times that many. It ranges from window-box vegetables to multi-million dollar corporations producing and processing a wide range of crops and livestock. In some countries, such as Chile, urban farmers outnumber rural farmers. And as the world becomes more and more urbanized, city farming is becoming much more than a subsistence mechanism for the poorest and a means of livelihood for many others. If properly managed and supported, experts say, it holds out the promise of ecological sustainability for the towns and megacities of the future – and the hope of turning sterile, dehumanizing cityscapes green.

The data vacuum

Urban agriculture is everywhere – from the slums of Nairobi to the residential neighbourhoods of Santiago to carefully designated sections of Shanghai. Yet it is not recognized as a viable urban industry and those who practise it are hobbled with constraints. "No one has paid any attention to it," says Irene Tinker, a professor at the Department of City and Regional Planning and Women's Studies at the University of California at Berkeley. "The data on urban farming is very weak." The most comprehensive global research on urban food production to date has been conducted by the United Nations Development Programme (UNDP), with assistance from the Urban Agriculture Network (TUAN) in Washington, DC. TUAN has documented urban farming practices in more than 20 countries in Asia, Africa and Latin America, bringing together a network of farmers, policy-makers, researchers, international agencies and government institutions. According to TUAN's research:

- Twenty-five to 75 per cent of urban families around the world are engaged in food production at least part of the time: 68 per cent of the families in Dares-Salaam, 37 per cent of the families in Maputo, 40 per cent in Suva (Fiji), 65 per cent in Moscow.
- In and around 18 of China's largest cities, farmers meet 85 per cent of the urban demand for vegetables, and more than half the demand for meat and poultry.
- In the United States, farms in metropolitan areas account for more than a third of all crop and livestock sales. About 30 per cent of the food in Russia is produced in suburban farm plots, or "dachas."
- In Java, urban home gardens supply an estimated 18 per cent of the calories and 14 per cent of the protein consumed in the island's cities. Farmers in Buenos Aires meet one-fifth of that city's nutritional needs.

Renato Rotolo / Gamma-Liaison

One of 1,000 community gardens in New York City.

Yet all this activity is almost invisible to most researchers and development professionals, and is ignored or even prohibited by most city planners and policy-makers. As a result, urban farmers complain that lack of access to land, water, inputs such as seeds, fertilizer and tools, and credit are their biggest problems, limiting their productivity and discouraging consistent investment in their farms. Without a clear understanding of the constraints facing urban farmers, their potential for feeding and greening the cities of the world could go unrealized. "Urban agriculture is getting swept aside because of an outmoded planning concept of the industrial city and agricultural countryside," says TUAN's director, Jac Smit. "Cities in the real world are not developing according to these divisions of labour. Urban agriculture is moving ahead," he adds, "and to some extent, we have to catch up with it."

Nutrition and incomes for the urban poor

By the year 2000, more than two billion people throughout the world will live in cities. More than half of those living in third world cities will live in poverty, spending 50 to 90 per cent of their incomes on the most basic element of survival – food. Because of transport costs, food generally costs at least 60 per cent more to city-dwellers than to people in rural areas. "When you add up all the costs and the pollution involved in bringing food into cities and getting rid of all the trash," says Irene Tinker, "you have a system that half the people in the cities can't afford."

But where urban farming is allowed to flourish, the added costs of transport from the rural areas, storage and wholesale handling are reduced or eliminated. Fresher produce is available to city dwellers, with 30 to 60 per cent more micro-nutrients than are found in supermarket stock. Particularly in

Left: With support from UNDP, a local NGO is recycling organic matter from garbage collected in Benin's capital, Porto Novo. After processing the waste material into compost, it is sold to local market gardeners (below).

Africa and Latin America, the majority of low-income urban farmers are women who produce vegetables, fruit and small livestock for their families. Experts says that this emphasis on vegetables is a primary nutritional benefit of urban farming. "Urban agriculture is an important source of crops high in micro-nutrients," says Per Pinstrup-Andersen, director-general of IFPRI, the International Food Policy Research Institute in Washington, DC. "These are vegetables of different kinds with a high content of vitamin A."

Yet despite this important contribution to nutrition, Pinstrup-Andersen cautions against "romanticizing" the future of urban agriculture. He is concerned that as cities become more and more crowded, urban farmers, particularly in low-income areas, will be increasingly hampered by a problem that dogs city-dwellers the world over: theft. "In most urban settings it's quite difficult to protect your produce," he notes. "People will steal your crop to survive."

Urban agriculture and the middle class

Low-income farmers often band together to defend their crops against thieves, while middle-class farmers are more likely to hire guards, build fences and take other precautions. For urban food production throughout the world is also a primary or secondary source of income for the middle class. Often these are professionals or civil servants whose salaries have been eroded by inflation or cut by austerity programmes. One group of women in Dar-es-Salaam, for example, farmed part-time to supplement the low wages from their government jobs. When they found that their gardens brought in three to 10 times as much income as their salaries, they switched to farming full time.

In Rio de Janeiro, vegetable farmers produced crops worth about US$10 million in 1983 alone, on unusable land under transmission lines which the electric company made available to them. A chicken-breeder in Jakarta, who started as a one-man operation, now employs 800 people, while a poultry conglomerate in Bangkok has contracts with some 10,000 chicken-farmers, most of whom are city dwellers. When practised commercially, urban agriculture has a multiplier effect on other industries, creating jobs in input supply (fertilizer, seeds, feed, extension services) and output handling (storage, transportation, canning, processing, marketing).

The environmental factor

From an environmental standpoint, Smit maintains that urban agriculture has an intrinsic advantage over large-scale rural food production. "Urban agriculture tends to be more organic than rural," he explains. "Rural farming in this century has moved towards larger farms that use chemicals and machinery to increase yields. And most rural agriculture is mono-cropping that needs fertilizers and insecticides." Instead, the sheer variety and small scale of most urban agriculture, where multi-cropping and animal husbandry both enrich the soil, reduces the need for environmentally-harmful chemicals and equipment.

And as a means of cleaning and greening the cities of the world, the potential of urban agriculture is tremendous. "In low-income areas of developing country cities, the soil is practically dead and breeds disease," says Smit. "Taking care of the soil helps to restore biodiversity to the city. When the soil is fed you get trees and bushes that clean the air. Diseases transmitted by dust and polluted water begin to disappear." Managed forestry, which is being carried out in cities including

Shanghai, Bangalore, Dakar and Chicago, can improve the urban environment and provide wood and other tree products. The planting of trees, shrubs and grasses also prevents erosion and the disastrous effects of landslides that often afflict the low-income areas of third world cities.

When properly managed, urban agriculture can safely process, and profitably use, two commodities which few cities in the developing world are handling safely or efficiently: sewage and solid waste. "Sweeping city waste beyond the doorstep is not sustainable," says Smit. Indeed, as the recent outbreak of pneumonic plague in western India illustrates, the lack of effective waste management in overcrowded modern cities can have horrifying effects. But when waste management is decentralized and carefully monitored to supply the needs of urban farmers, Smit maintains, it becomes more efficient, cutting costs to the city and reducing health hazards. A growing number of countries have already learned this lesson: In China in 1991, the Shanghai Bureau of Environmental Sanitation was collecting 90 per cent of the city's human waste (8,000 tons) each day, treating it, and selling it to farmers in the metropolitan area. Treated waste water is used for irrigation in parts of India, as well as in Mexico, Morocco, Israel, Jordan, Tunisia and in the US state of California. Biological treatment of sewage using duckweed and water hyacinth is practised in Bangladesh, China, India, Mexico and the US.

One example of food production combined with waste-water management is the fisheries cooperatives of East Calcutta, where some 4,000 families produce five to seven tons of fish per hectare each year, supplying 10 to 20 per cent of Calcutta's demand for fish. For more than 60 years, local fishermen have maintained a network of wetland ponds (now covering 8,000 hectares) into which controlled amounts of the city's raw sewage are released. In Calcutta's hot climate, it takes about two weeks for wastes to break down in the flat-bottomed ponds through photosynthesis. Waste-fed water hyacinth and duckweed provide nutrient-rich food for buffaloes as well as for fish. Scientists maintain that this biological system of waste-processing produces fish that are as safe to eat as non-sewage pond-grown fish, and that it can be a model for productive waste management in other tropical countries.

As a means of cleaning and greening the cities of the world, the potential of urban agriculture is tremendous.

Near the sewage-fed lagoons is Calcutta's main garbage dump. Here municipal authorities lease out about 800 hectares of land on old dump sites rich in compost for farming. Small farmers and cooperatives produce 150 to 300 tons per day of up to 25 varieties of vegetables. Though the vegetables have been found to be safe for consumption, proper cooking is recommended to prevent contamination.

Of course, there are significant health hazards associated with urban agriculture. The use of improperly treated waste in farming caused a cholera epidemic in Chile and Peru in 1991. Food grown along roadsides can be contaminated by lead from vehicular emissions, which can also deposit heavy metals in the soil. And chemical fertilizers and insecticides, along with animal wastes, can leach into the soil and water table, causing serious health problems in densely populated urban areas. Farmers have always used organic solid waste to enrich soils, but with the increasing toxicity of urban refuse, this requires more care.

Research by a number of international organizations shows that it is safe to use waste for farming, provided that consistent and well-monitored treatment procedures are followed. Critics, however, point out that cities in the poorest countries often lack the institutional capacity to properly manage and monitor such treatment.

Smit recommends that the impact of toxic wastes, including heavy metals, be studied in individual cities, and that crops with the least susceptibility to contamination be grown, such as tomatoes and tree-borne fruit instead of lettuce and other low-growing vegetables. He also warns against lettuce and produce with "hairy" leaves in cities where lead in automobile emissions is a problem. The absorption of lead by plants is reduced, he says, in soil that has a high organic content. This is the case in many third world cities, where soils are frequently fertilized with garbage-based compost. Ultimately, Smit says, the greatest dangers to urban environments are likely to come from high-profit, high-tech, monoculture agribusinesses, such as shrimp farming. Careful monitoring and controls will be required to ensure the safety of such farming systems.

The need for supportive policies

Despite its benefits, many cities continue to ban urban food production or specific farming systems, though enforcement is often haphazard. Biases against the "messy, backward," negative image of city farming – as well as some real hazards that need to be addressed – have resulted in a widespread lack of support at the policy level. There is very little data collection, land allocation or legislation designed to support urban farmers.

This very lack of support is often the reason that problems connected with

urban agriculture persist. TUAN maintains that proper research, city planning and extension services would enable urban producers to correct hazardous conditions such as food contamination and water table pollution that result from inadequate waste processing and poor farming practices. Support for urban farmers would involve them in safe, thorough waste-processing. Secure land tenure would provide the incentive to invest in the long-term health of the soil, and agricultural extension workers would teach farmers techniques that are sustainable. Official recognition of urban farming as a viable and valuable industry would involve access to credit for urban farmers, enabling them to increase their productivity by planning ahead. Government encouragement of urban farmers' associations would strengthen the farmers' ability to organize collective systems of input-supply, transport, storage, marketing and protection against theft.

Interestingly enough, Smit says there is plenty of land and surface and waste water in the vast majority of the world's cities to support urban agriculture. Problems of access to land and water, he maintains, are political and administrative rather than physical. According to one study by the UN Centre for Human Settlements (UNCHS), up to 50 per cent of the total area in many developing country cities is vacant public land where farming is possible.

Up to 50 per cent of the total area in many developing country cities is vacant public land where farming is possible.

The move toward sustainable cities

As environmental awareness increases around the world, the negative image of messy, marginal urban gardens is slowly giving way to a new consciousness: an appreciation for green things in hard-edged urban settings, an awareness that millions of city-dwellers must have access to affordable food, and a sense of urgency that city waste must be processed more efficiently. Several industrial countries, such as the Netherlands and Canada – and many individual cities – are drawing up "green plans" that include provisions for the support of urban farmers, as well as extensive tree-planting and efficient waste-processing.

At the international level, UNCHS launched a "Sustainable Cities Programme" in 1990. Under its auspices, some 14 cities – ranging from Ismailia in Egypt to São Paolo in Brazil and from Dar-es-Salaam, Tanzania to Katowice, Poland – are not only redefining their concepts of what a city needs for healthful sustainability, they are also redesigning the means of achieving their newly-defined "green" goals. "The old approach was to have a master plan prepared by an expert that was rarely implemented, while the city continued to grow on its own logic," says Robertson Work of UNDP. Instead, he says, issues-oriented task forces are being organized that include representatives from local government, NGOs, community-based organizations and the private sector. The task forces plan strategies to address various urban issues, such as waste management and the use of public lands. "By involving local actors you attempt to manage the city in a way that responds better to everyone's needs," says Work.

"There are hundreds of cities in rich countries and poor that have this target: to be a green city, a garden city, a sustainable city," says Smit. In the industrial world, he points out, it is the city governments that finance greening and cleaning programmes. In the developing world, he maintains, the cost can be borne by urban food production. "Particularly in countries where families are spending up to 90 per cent of their income on food, urban agriculture is a very effective means of greening a city. It improves the urban environment through an economic activity that brings in income. For low-income countries, urban agriculture is the way to go."

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A more comprehensive study entitled *Urban Agriculture: Food, Jobs and Sustainable Cities*, prepared in cooperation with TUAN, will be published by UNDP in 1995.

Rooftop Gardening in Bogotá

Photos by Sarita Kendall / UNDP

Ana Rita Laguna's hydroponic garden.

Bogotá, Colombia – Ana Rita Laguna has 70 square metres of flat cement roof above her home, and every centimetre is crammed with lettuces, radishes, turnips and parsley. Some of the vegetables are ready to be harvested and will be collected by a truck that comes twice a week. Others are seedlings that will take another 60 days to mature. All are grown "hydroponically" – either in a 15-centimetre deep mixture of rice husks and coal chips or entirely in water.

Five years ago, Ana Rita joined a hydroponics project run by Las Gaviotas, a Colombian NGO that specializes in low-cost technologies. With UNDP support, over 100 people in the poor, windswept barrio of Jerusalén, in the hills of southern Bogotá, learned to grow high-quality vegetables on rooftops and in other unused spaces. A hydroponics association was set up and has since been operating without outside help, apart from the occasional visit by an agronomist with a personal interest in seeing how things have developed. Today there are around 25 active members who contribute a quarter of the sales value of their produce to keep a small office and the association's truck running.

To save space, lettuce will be grown in vertical plastic tubes.

Two of the biggest supermarket chains in Bogotá buy the vegetables. At first, the growers found it difficult to ensure good quality and a regular, year-round supply. But over time they have learned a lot. Ana Rita, who is the association's treasurer, says she makes a regular 30,000 to 40,000 pesos (US$37.50 to $50.00) profit a month and sometimes as much as 80,000 pesos ($100). In a country where the average per capita income is $1,400 a year, this is a welcome addition to her husband's monthly earnings. She spends half an hour watering the plants each day, and her six children eat plenty of salads.

Just up the hill, the roof-top terrace of Jerusalén's school is filled with a particularly fine display of crops cared for by another association member, Trinidad Varela. Looking over the bleak, treeless barrio landscape, she says she finds cultivating lettuces to be wonderful therapy in a city full of tension and violence. Secondary students are learning to be urban farmers and people from other barrios are coming to Jerusalén for courses on hydroponics and practical advice.

Other association members are experimenting with new methods and products, such as ornamental plants and prepared salads. "We have very little space, so to maximize production we're starting vertical cultivation," says Tito López, pointing to a pile of tall orange plastic tubes with holes drilled into them. "Of course," he adds, "even in the city crops are at the mercy of the climate and disease." ■

– Sarita Kendall

SHORING UP THE FUTURE ON GHANA'S LAKE VOLTA

BY CHRISTOPHER REARDON

A UNDP-SUPPORTED PROGRAMME ON THE SHORES OF LAKE VOLTA IS HELPING TO PRESERVE THE VIBRANCY OF GHANA'S INLAND FISHERIES. AT THE SAME TIME IT IS WORKING TO PROTECT OTHER NATURAL RESOURCES, WHICH, IF FURTHER EXPLOITED, COULD THREATEN FUTURE LIVELIHOODS AND A UNIQUE WAY OF LIFE.

Yeji – The sun beats heavily on the marketplace as Fathia Afagbedzi beckons a potential customer. "My friend," she calls, "come here."

"How much?" replies a trader from Kumasi, eyeing her baskets brimming with smoked catfish.

The two women banter back and forth, from offer to counteroffer, before settling on a price. Afagbedzi will repeat the ritual a hundred times before sundown, and thousands more before the fishing season draws to a close. One of several hundred local merchants whose prosperity confers the title of market queen, she acts as a sort of middleman, buying from nearby fisherfolk and selling to traders from afar.

Each year Afagbedzi and others like her sell as many as 10,000 metric tons of freshwater fish in Yeji, a town on the shores of Lake Volta that harbours Ghana's largest inland fish market. Diesel buses and lorries come from as far away as Accra, 500 kilometres to the south. Fish is the principal source of dietary protein for most people in West Africa, and Ghanaians, who consume an average of 22.5 kilograms of fish per year, are no exception.

Mounting pressure on Lake Volta's fish stocks, however, is jeopardizing the country's ability to produce enough protein-rich foods to sustain its 16 million people. Drought and other factors have noticeably reduced the lake's volume and, consequently, its fish stocks. And the pressure on it is higher than ever: thousands of families have left behind the overfished waters off Ghana's southern coast to try their luck on the Volta. Between 1970 and 1991, according to surveys by the Food and Agriculture Organization of the United Nations (FAO), the number of fishermen near Yeji rose tenfold – from 1,738 to 18,312. The added strain on timber and other natural resources further clouds the region's future.

Nana Yejihene, chief of the Yeji Traditional Area, sums up the problem: "If

Christopher Reardon / UNDP

we have no renewable source of firewood, deforestation is inevitable. Without firewood, we will have trouble curing the fish. And without fish to sell, our economy will fall into ruin."

Since 1988, the United Nations Development Programme (UNDP) and the FAO have supported an Integrated Development of Artisanal Fisheries programme, called IDAF for short, to shore up the future of the 91,000 people who live in Yeji and 342 outlying villages. As a result, fishermen are planting trees and food crops on the lake's fertile banks, giving them an additional source of food and income. Their wives, who preserve fish by smoking it, are turning to redesigned ovens that conserve fuel and reduce the time spent gathering firewood. Merchants like Afagbedzi are taking classes to improve their literacy and accounting skills. And by adopting improved techniques for fish handling, processing, storage and marketing, residents of Yeji and nearby communities are not only revitalizing their economy, but also safeguarding their livelihoods for the long term.

The weekly cycle that culminates at Yeji's marketplace each Monday begins six days earlier, when fishermen set out in the early morning light to work their nets and traps. So it has been since the completion, in 1964, of the Akosombo Dam, which serves as the foundation for a national hydroelectric power project. The Volta River flooded a wooded valley the size of Luxemburg and formed the world's largest artificial lake. Today defoliated trees spread below the water's surface like outstretched hands. Gloved in algae, their fingerlike limbs offer fertile feeding grounds for fish. Yet even in calm weather, fishing vessels toss easily against their unforgiving trunks and branches.

The fishermen who ply Lake Volta's waters quickly grow accustomed to such hazards. What they find harder to accept is the high cost of boats, engine parts and nets. The cost of the gear, together with high interest rates on loans, make it difficult for them to turn a profit. Heightened competition has only added to their frustration.

To boost their revenues, many fishermen have taken to using illegal nets and traps – often in plain view of officials from the Department of Fisheries. But while these practices are yielding larger catches, they also exploit pregnant and immature fish and are causing the fish population to dwindle. Department officials contend that bureaucratic intricacies and lack of funds make enforcement of fishing regulations unworkable.

Other fishermen are finding an alternative – and less destructive — course by pressuring suppliers of fishing gear to lower their prices. With support from IDAF, a number of boat builders, mechanics and net sellers have formed professional associations and cooperatives to boost efficiency and cut costs. Fish processors, salt sellers, ferrymen and fish merchants have banded together to do the same. Philimon D'ekle, chairman of the Boatbuilders Association, says he and 25 of his peers have lowered their expenses by ordering galvanized nails, nuts and bolts in bulk. Electric saws and drills, together with a generator, which are shared among them, have reduced labour costs as well.

When fishermen return from the lake to their villages, often late at night, they turn their catch over to their wives. A blistering climate and lack of refrigeration make the women's work indispensable. Unless properly salted or smoked, the fish spoils before reaching the weekly market.

"Here," says one of the women, "is the new oven." She points to a rectangular concrete fireplace on the chimney of which she has stacked four trays of catfish. Three years ago, she and 60

other women in the village of Jaklai began to forego their cylindrical mud cookers for Chorkor ovens at a communal fish processing centre built with UNDP support. So popular is the new model that women built their own Chorkor ovens when the line at the communal ovens got too long. Named for the Ghanaian village where it was first introduced, the Chorkor not only smokes fish more evenly than traditional ovens, the women say, but is also safer and more durable. It handles larger quantities of fish while burning considerably less wood.

The Chorkor's appeal is not lost on these women, who typically walk as many as six kilometres through the savanna grassland to gather firewood. But although the new model saves legwork, it does nothing to replenish the region's timber supply.

"If people continue to cut firewood from natural growth, the region will become a desert," says FAO's Bridget Moulah Parente, who recently visited Yeji and neighbouring communities. "At the rate women are currently cutting trees, there will be none left in five to 10 years."

To reverse this trend, IDAF broadened its scope to include agroforestry. From a nursery in Yeji, the programme distributes seedlings to farmers and fish processors in nearby villages. It has also set up a number of communal woodlots to demonstrate the merits of tree planting. Residents of Yeji were among the first to take notice, and through their Town Development Committee began raising seedlings on their own. In time, they will be able to harvest the trees for firewood, lumber and animal feed. Already cashews and mangos are providing additional sources of protein and vitamin C, and the neem tree serves a host of medicinal purposes.

Traditional fisheries management, says Charles Asafo, deputy director of the Ministry of Agriculture, overlooks many of the secondary activities and social needs of fishing communities.

Christopher Reardon/UNDP

ONE OF YEJI'S "MARKET QUEENS."

By practising animal husbandry, restoring the forest cover, checking erosion and thereby preventing silting of the lake, he says, Yeji and its satellite communities are safeguarding their means of subsistence for the future.

Fishermen, for their part, are now supplementing their incomes by farming when the fishing season winds down. The fertile lowlands exposed where the lake has receded yield a rich harvest of maize, cassava, cow peas and tomatoes. Soybeans also thrive, providing an additional source of protein. Until recently, few fishermen had shown an interest in farming. But after seeing a demonstration plot set up by IDAF, they started signing up for lectures on farming and purchasing seeds with help from a revolving loan fund.

Fishing, nevertheless, remains the dominant industry. To ensure its survival, UNDP has provided US$300,000 for a new marketplace known locally as the community fisheries centre. Governed by the chief of Yeji and other local officials, the centre is designed to improve fish marketing as well as social conditions in the community. If all goes as planned, the centre will not only be financially self-sustaining, but will generate profits through landing fees assessed on boats, rental of market stalls, taxes on fish sales and parking fees imposed on buses and lorries. Safer access ramps will make it easier to unload boats and reduce exposure to waterborne diseases. Other planned facilities include a boatyard, weighing sheds for carts of fish, net-sellers' shops and an assembly hall.

"Many of these facilities already exist in rudimentary form," says Yeji's chief, Nana Yejihene. "The centre will strengthen them in a way that cuts down on the number of fish that spoil or go unsold."

The centre will also help to bring badly-needed social services to communities near Yeji. The Ministry of Health, for example, has plans to operate a clinic at the centre and to extend immunization programmes and other health services to nearby villages. The Ministry of Education will manage a day-care centre at the new marketplace and expand non-formal education in the area. A $1.2 million contribution from the Japanese government will help to support the development of infrastructure and social services as part of the new fisheries complex. If successful, the Ghanaian government intends to develop six similar fisheries centres elsewhere on the lake.

As it has for three decades, Yeji's market teems with vitality. It is that same energy that is now being redirected to ensure sustainable livelihoods in the years to come.

"Give way," shouts a stevedore, piloting his cart and cargo – rattan baskets of fish stacked two metres high – through the crowd. Farmers attend their tables, trading okra for avocados, plantains for groundnuts, cow peas for baby limes and shallots. Buskers by the roadside peddle wide-brimmed hats and brooms made of palm. And market queens beneath thatched roofs call out to passersby. As the sun dips a little lower in the sky, Afagbedzi can be heard among them, completing another sale. ■

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Rwandan Refugee Crisis Triggers an Ecological Disaster

Kibumba refugee camp in Zaire.

Malcolm Linton / Black Star

Beyond the unspeakable human tragedy of the civil war in Rwanda is an ecological catastrophe that continues to unfold.

Last October, a research team sponsored by the United Nations Development Programme (UNDP) reported on the serious environmental problems caused by Rwandan refugees in Zaire. Most critical was the impact of nearly half a million refugees living in five camps in or near Virunga National Park – a World Heritage Site that is especially rich in rare species of mammals, birds and plants. "While our first concern remains the humanitarian one," says UNDP's John Hough, "it is also important that the environmental dimension be considered in any decision taken on the future of the camps."

The team noted that 7,000 to 10,000 cubic metres of wood were being collected from the Virunga forest each day, 60 per cent of it new growth. The wood is needed for fuel and to build shelters, and has become a valuable commodity and significant source of income.

The team also reported that human waste was being deposited in a 6,000 square metre area of the park with little treatment. Dumped garbage and medical waste were being scattered by animals in search of food, and could lead to the spread of disease among both human and animal populations. Continued pressures, the team warned, could cause irrevocable damage in terms of deforestation and loss of wildlife.

Among the contributors to the problem are various relief agencies, which have been overwhelmed by both humanitarian needs and security problems in the camps. The team recommended that stricter environmental guidelines for refugee crisis management be drawn up and enforced.

To respond to immediate threats to the park's biodiversity, UNDP has secured US$250,000 in emergency funds through the Global Environment Facility. The situation has also drawn the attention of other donors, including the European Union and the German bilateral aid agency, GTZ. ■

Once again, the **HUMAN DEVELOPMENT REPORT** *challenges the status quo.*

THE 1994 REPORT SHOWS:

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- **How development assistance has worked for and against the poorest people of the world, and why foreign aid by itself is no answer.**
- **How the 1995 Social Summit can be a turning point toward sustainable human development.**

The cover of the 1994 report shows the decline in global military spending from 1987 to 1994, which yielded a "peace dividend" of US$935 billion. Unfortunately, little of this has been directed to urgent human needs. If arms spending goes on declining by three per cent a year, another $460 billion could be saved from 1995 to 2000. How will it be spent? This will be one of the challenges for the World Summit for Social Development in 1995.

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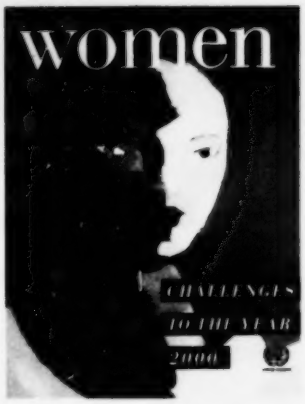

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